Montana Fish, Wildlife & Parks

March 3, 1998

1420 East 6th Ave.
P.O. Box 200701
Helena, MT 59620-0701

Environmental Quality Council
Montana Department of Environmental Quality
Montana Department of Fish, Wildlife and Parks
  Fisheries Division
  Endangered Species Coordinator
  Nongame Coordinator
  Great Falls Office
Montana State Library, Helena
MT Environmental Information Center
Montana Audubon Council
Teton County Conservation District
Cascade County Conservation District
U.S. Army Corp of Engineers, Helena
U.S. Fish and Wildlife Service, Helena
State Historic Preservation Office, Helena
Greenfields Irrigation District
Ray White, Trout Habitat Specialists
Marc Lee, 690 Fifth Rd. NE, Fairfield, MT 59436

Ladies and Gentlemen:

Please find enclosed an Environmental Assessment prepared for a Future Fisheries Project tentatively planned to restore riparian vegetation and stabilize eroding stream banks within a 1 mile segment of Spring Coulee, a tributary to Muddy Creek, located near the town of Vaughn.

Please submit any comments that you have by 5 P.M., April 3, 1998 to the Department of Fish, Wildlife and Parks in Helena at the address listed above. Completion of this project is contingent upon approval being granted by the Fish, Wildlife and Parks Commission. If you have any questions, feel free to contact me at (406) 444-2432.

Sincerely,

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division

Teton

ENVIRONMENTAL ASSESSMENT
Fisheries Division
Montana Fish, Wildlife and Parks
Spring Coulee Trout Habitat Project

General Purpose: The 1995 Montana Legislature enacted statute 87-1-272 through 273 which directs the Department to administer a Future Fisheries Improvement Program. The program involves physical projects to restore degraded fish habitat in rivers and lakes for the purposes of improving wild fisheries. The legislature established an earmarked funding account to help accomplish this goal. This project is being proposed to restore riparian vegetation and stabilize eroding stream banks along a 1 mile segment of Spring Coulee located near the town of Vaughn.

I. Location of Project: This project will be conducted on Spring Coulee near the town of Vaughn within Township 22 North, Range 1 West, Section 17 in Teton County.

II. Need for the Project: Department Goal A indicates that a Fisheries Division objective is to "protect existing aquatic habitat and improve degraded stream systems for the welfare of healthy fish populations and other wildlife species and for public enjoyment and use." The Future Fisheries Improvement Program is a tool to help achieve that objective.

Spilling of excess canal water and an increased inflow of groundwater as a result of the Greenfields Irrigation system has created high, channel altering, flows in the Spring Coulee drainage. These high flows, in conjunction with past land use activities, have widened the channel and created a series of unstable and eroding banks. Currently, the degraded condition of the channel provides marginal habitat for fish. The proposed project would protect the riparian vegetative community from livestock grazing by fencing and would stabilize selected stream banks by installing natural material revetment.

III. Scope of the Project:

The proposal calls for restoring the riparian vegetative community and stabilizing selected stream banks along a 1 mile segment of Spring Coulee. The riparian community would be restored by protecting the stream corridor with approximately 1.1 mile of newly constructed fence. Additionally, the proposal calls for planting native willow along the stream corridor. Selected banks would be stabilized by installing intermeshed tree revetment to limit erosion. This project is expected to cost $42,165.00. Of this total, the Future Fisheries Improvement Program would be contributing up to $16,810.00.

IV. Environmental Impact Checklist:

Please see attached checklist.

V. Explanation of Impacts to the Physical Environment

1. Terrestrial and aquatic life and habitats.

Protecting the riparian zone from livestock grazing with fencing and stabilizing eroding banks along a 1 mile segment of stream is expected to create a more diverse and healthy habitat for aquatic life. Expected improvements in the aquatic habitat should enhance resident trout populations in the stream. Habitat for riparian dependent wildlife would also be improved through riparian fencing and the planting of willow along the stream corridor.

2. Water quantity, quality and distribution.

Short term increases in turbidity will occur during project construction. To minimize turbidity, construction will occur during a low flow period and operation of equipment in the stream channel will be minimized to the extent practicable. A permit for a short term exemption from turbidity will be obtained from the Water Quality Bureau and a 310 permit will be obtained from the local Conservation District. In the long term, protecting the riparian zone from livestock grazing, stabilizing erodible banks and planting willow along the stream corridor would reduce the sediment contribution to downstream areas, thereby improving the overall quality of downstream waters. Spring Coulee is a tributary to Muddy Creek, a stream renowned for its high sediment loads. Reducing erosion in the Spring Coulee drainage would improve water quality in Muddy Creek as well.

3. Geology and soil quality, stability and moisture.

No effects on geology and soils are expected above the high water mark. Below the high water mark, the project is expected to create a more stable stream channel.

4. Vegetation cover, quantity and quality.

Riparian vegetation and cover would be improved by protecting the riparian zone from cattle grazing, stabilizing erodible stream banks and planting native willow along the stream corridor.

5. Aesthetics.

Aesthetics would be enhanced by restoring a degraded reach of stream to a more healthy and natural stream environment. Erodible banks along a 1 mile reach of stream would be stabilized with native material revetment. The riparian vegetative community would be enhanced by planting native willow along the stream corridor. Additionally, the riparian zone would be protected from livestock grazing by fencing.

9. Historic and archaeological sites.

The proposed project will likely require an individual Army Corp of Engineers (COE) 404 permit. Therefore, the State Historic Preservation Office has been contacted to

determine the need for compliance with the federal historic preservation regulations. The project will not begin until a cultural clearance is granted.

VI. Explanation of Impacts on the Human Environment.

7. Access to & quality of recreational activities.

It is anticipated that the restoration of a 1 mile reach of Spring Coulee would improve overall aquatic habitat and, as a result, would enhance trout populations residing in the stream. Consequently, the recreational fishery in the stream would be expected to be improved. The property owner allows limited public access to this site.

VII. Discussion and Evaluation of Reasonable Alternatives.

1. No Action Alternative

If no action is taken, a 1 mile segment of Spring Coulee will remain unstable and fish populations will remain low. In addition, habitat for riparian dependent wildlife will remain in a degraded condition. Recreational opportunities associated with fish and wildlife resources will remain reduced and aesthetics will continue to be impaired.

2. The Proposed Alternative

The proposed alternative is designed to stabilize erodible banks by protecting the riparian vegetative community through fencing, installing intermeshed tree revetment at selected sites and planting native willow along the stream corridor. These activities would reduce sediment loading, resulting in a more diverse habitat for aquatic life. Protecting the riparian vegetative community from livestock grazing and planting native willow along the stream corridor would create a more diverse habitat for riparian dependent wildlife. This alternative would improve fish and wildlife habitat, aesthetics and water quality within the project area and would be expected to increase trout populations in the stream.

VIII. Environmental Assessment Conclusion Section

1. Is an EIS required? No.

We conclude from this review that the proposed activities will have a positive impact on the physical and human environment.

2. Level of public involvement.

The proposed project was reviewed and supported by the public review panel of the Future Fisheries Improvement Program. The proposed project also will be reviewed by the Fish, Wildlife and Parks Commission and will be contingent

upon their approval. The Environmental Assessment (EA) is being distributed to all individuals and groups listed on the cover letter. The EA will be published on the Montana Electronic Bulletin Board.

3. Duration of comment period?

Public comment will be accepted through 5 P.M. on April 3, 1998.

4. Person responsible for preparing the EA.

Mark Lere, Program Officer
Habitat Protection Bureau
Fisheries Division
Montana Department of Fish, Wildlife and Parks
1420 East 6th Avenue
Helena, MT 59620

Telephone: (406) 444-2432

MONTANA DEPARTMENT OF FISH, WILDLIFE AND PARKS
1420 E 6th Ave, PO BOX 200701, Helena, MT 59620-0701
(406) 444-2535

ENVIRONMENTAL ASSESSMENT

Project Title Spring Coulee Trout Habitat Project

Division/Bureau Fisheries Division -Future Fisheries Improvement

Description of Project The project is being proposed to restore riparian vegetation and stabilize eroding stream banks along a 1 mile segment of Spring Coulee located near the town of Vaughn.

POTENTIAL IMPACT ON PHYSICAL ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Terrestrial & aquatic life and habitats		X				X
2. Water quality, quantity & distribution			X			X
3. Geology & soil quality, stability & moisture			X			X
4. Vegetation cover, quantity & quality			X			X
5. Aesthetics			X			X
6. Air quality				X		
7. Unique, endangered, fragile, or limited environmental resources				X		
8. Demands on environmental resources of land, water, air & energy				X		
9. Historical & archaeological sites				X		X

POTENTIAL IMPACTS ON THE HUMAN ENVIRONMENT

	MAJOR	MODERATE	MINOR	NONE	UNKNOWN	COMMENTS ON ATTACHED PAGES
1. Social structures & mores				X		
2. Cultural uniqueness & diversity				X		
3. Local & state tax base & tax revenue				X		
4. Agricultural or industrial production				X		
5. Human health				X		
6. Quantity & distribution of community & personal income				X		
7. Access to & quality of recreational and wilderness activities			X			X
8. Quantity & distribution of employment				X		
9. Distribution & density of population & housing				X		
10. Demands for government services				X		
11. Industrial & commercial activity				X		
12. Demands for energy				X		
13. Locally adopted environmental plans & goals				X		
14. Transportation networks & traffic flows				X		

Other groups or agencies contacted or which may have overlapping

jurisdiction Teton County Conservation District, NRCS, Army Corp of Engineers

Individuals or groups contributing to this EA Trout Habitat Specialists

Recommendation concerning preparation of EIS No EIS required.

EA prepared by : Mark Lere

Date: March 3, 1998